

## Short Communication

### Rectification of the type status for *Philiris ziska titeus* D'Abrera, 1971 (Lepidoptera: Lycaenidae)

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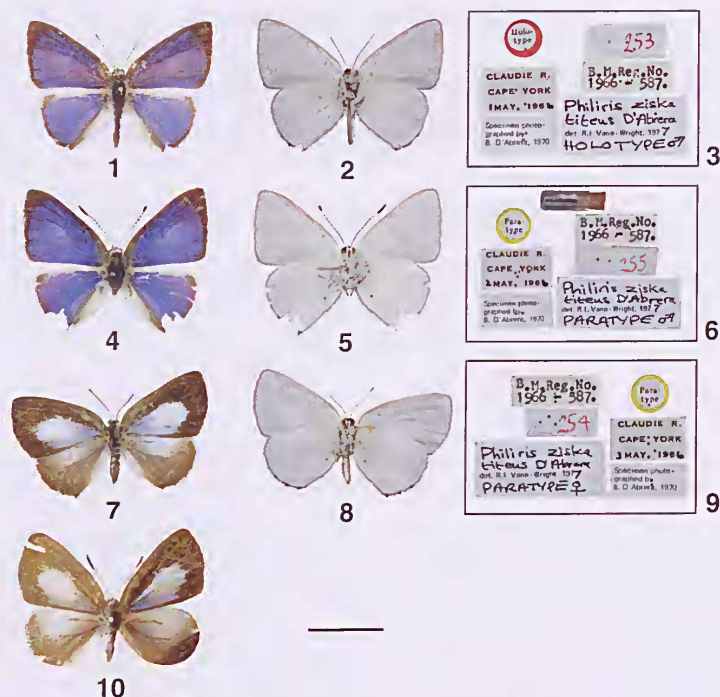
Kerr (1967) recorded *Philiris ziska* (Grose-Smith, 1898) from Australia based on a series of 11 males collected from near the Claudie River (now incorporated in Iron Range National Park, Cape York Peninsula, Queensland) during April and May 1966. Kerr's material was subsequently dispersed among three collections: Australian National Insect Collection, Canberra (ANIC: J. Macqueen and L.E. Couchman collections), Natural History Museum, London (BMNH), and his own private collection, Brisbane. Kerr (1967: 49) noted that two of his specimens were examined by lycaenid expert G.E. Tite, and commented on phenotypic differences in comparison with material from mainland New Guinea in the BMNH, but cautioned that "...the question of subspecific status must await further material". D'Abrera (1971), however, shortly proceeded to describe it as a subspecies *Philiris ziska titeus* D'Abrera, 1971 from Australia, based on material collected from Cape York Peninsula, Queensland, and illustrated three syntypes (2♂, 1♀) housed in the BMNH. Other than stating the range as "Claudie River (Cape York)" (D'Abrera 1971: 373) the label data of this material was not given, and D'Abrera neither provided a diagnosis nor indicated how the taxon differed from the nominate subspecies from mainland New Guinea. It has been assumed (Sands 1979) that the two males included as syntypes by D'Abrera (1971) in his description of *titeus* were, in fact, the same two specimens lodged in the BMNH by Kerr; however, because D'Abrera (1971) did not provide label data of the material examined this assumption has not been validated. Moreover, the location and to some extent the identity of the female have remained uncertain because this sex was not mentioned by Kerr.

Braby (2000) did not formally recognise *P. ziska titeus*, mainly because of the cautionary comments made by Kerr (1967), and Edwards *et al.* (2001) subsequently synonymised this taxon under the nominate species. However, Samson and Johnson (2009) recently reinstated the subspecies *P. ziska titeus* and noted several differences between the two subspecies. They also confirmed the identity of the female sex, which until that stage had not been determined with certainty. Compared with *P. ziska*

*ziska* (Grose-Smith, 1898), adults of *P. ziska titeus* from Iron Range are smaller, the male frequently possesses a white suffusion in the postmedian area on the upperside of the fore wing (with the white are varying from few scattered scales to a prominent patch), and the female has more extensive white central areas on the upperside of both wings (Samson and Johnson 2009). Comparison of the illustrations of the two subspecies shown in D'Abrera (1971), Parsons (1998), Braby (2000) and Samson and Johnson (2009) indicate that *P. ziska titeus* male is also distinguished in having the black apex and termen of the fore wing broader, and the white costal streak on the hind wing more prominent and extending to the base.

In describing *Philiris ziska titeus* in his popular book, D'Abrera (1971) made reference to a 'type' specimen amongst the three he illustrated, but did not designate a holotype. That description is unquestionably valid, so the name is available from that work. Although the specimen was depicted above a large red spot, the spot is ambiguous because D'Abrera nowhere explicitly stated that specimens with red spots constituted holotypes, but made an implicit statement to the effect that "I have used type specimens in the illustrations...contained in the British Museum collections..." (D'Abrera 1971: 7). Furthermore, according to Article 72.1.2 of the ICZN (1999) regarding the use of the term 'type' relating to specimens, the name-bearing type is either a holotype if *fixed originally* or a lectotype if *fixed subsequently*. Hence, D'Abrera's vague reference to a type for *P. ziska titeus* does not constitute an original fixation, unlike, for example, *Pseudodipsas eone una* D'Abrera, 1971 in which he provided type data of the specimen with the red spot and used the word 'holotype' (D'Abrera 1971: 341).

Both Edwards *et al.* (2001) and Samson and Johnson (2009) referred to a 'holotype' of *P. ziska titeus*; however, this action is herein interpreted to constitute an incorrect subsequent fixation. Moreover, their nomenclatural action was based on an illustrated syntype and is not evidence that the specimen is fixed (Article 72.4.7). According to Article 73.2 of the ICZN (1999), all the specimens of the type series are automatically syntypes if neither the holotype nor a



Figs 1–10. *Philiris ziska titeus* D'Abrera, 1971 type material in The Natural History Museum, London (BMNH). 1–3, lectotype male, showing upperside, underside and labels; 4–6, paralectotype male, showing upperside, underside and labels; 7–9, paralectotype female, showing upperside, underside and labels; 10, paralectotype female showing upperside. Scale bar is 10 mm.

lectotype has been fixed. In other words, when a nominal species-group taxon has multiple syntypes, all have equal status in nomenclature as components of the name-bearing type. Further, Recommendation 73F states that where there is more than one specimen in which no holotype was fixed for a nominal species-group taxon established before 2000, an author should proceed as though syntypes may exist and, where appropriate, should designate a lectotype rather than assume a holotype. Examination of D'Abrera's syntypes in the BMNH indicate that R.I. Vane-Wright had earlier labelled one of the syntype males as 'holotype' and the two other specimens as 'paratypes'; however, these designations are incorrect because D'Abrera (1971) designated neither a holotype nor a paratype.

Therefore, in accordance with Article 72.2 (fixation of name-bearing types from the type series of nominal species-group taxa established before 2000) and Article 74.1 (designation of a lectotype) of the ICZN (1999) I hereby designate one of D'Abrera's syntypes as the lectotype to become the unique bearer of the name *Philiris ziska titeus* and to constitute a formal subsequent fixation since the name was first introduced almost four decades ago. This nomenclatural action does not affect the name of the taxon. Of the syntypes in the BMNH, the male specimen illustrated by D'Abrera (1971: 373) with the red spot below it is selected as the lectotype (Figs 1–3) because: (1) this is apparently the specimen that D'Abrera intended to be

the unique bearer of the name *P. ziska titeus*; (2) R.I. Vane-Wright assumed that this was the 'holotype'; and (3) the specimen was previously illustrated showing the upperside, which portrays the diagnostic features of the taxon. The label data for the lectotype male is as follows: "CLAUDIE R., CAPE YORK, 1 MAY, 1966" [printed label prepared by J.F.R. Kerr], "Specimen photo-graphed by B. D'Abrera, 1970", "B.M. Reg. No. 1966-587.", "253", "Holo-type", "Philiris ziska titeus, D'Abrera, det. R.I. Vane-Wright, HOLOTYPE ♂". Comparison of the image of this specimen in D'Abrera (1971) with that of Figure 1 indicate damage to the antennae, with the clubs missing, but otherwise it is identical.

The two other syntypes illustrated by D'Abrera (1971) must now be regarded as paralectotypes, and not paratypes as considered by R.I. Vane-Wright or Samson and Johnson (2009). The label data for these paralectotypes is as follows: 1♂ (Figs 4–6) labelled "CLAUDIE R., CAPE YORK, 2 MAY, 1966" [printed label prepared by J.F.R. Kerr], "Specimen photo-graphed by B. D'Abrera, 1970", "B.M. Reg. No. 1966-587.", "255", "Para-type", "Philiris ziska titeus, D'Abrera, det. R.I. Vane-Wright, PARATYPE ♂". Abdomen stored in genitalia tube pinned beneath specimen; 1♀ (Figs 7–9) labelled "CLAUDIE R., CAPE YORK, 3 MAY, 1966" [printed label prepared by J.F.R. Kerr], "Specimen photo-graphed by B. D'Abrera, 1970", "B.M. Reg. No. 1966-587.", "254", "Para-type", "Philiris ziska



titeus, D'Abrera, det. R.I. Vane-Wright, PARATYPE ♀". Comparison of the image of the paralectotype female in D'Abrera (1971) with that of Figure 7 indicate damage to the antennae, with the clubs missing, and that the left fore wing has been dislodged and reglued, but otherwise it is identical. Comparison of the image and description of this specimen provided by D'Abrera (1971) with the diagnosis and illustration for the female sex of *P. ziska titeus* provided by Samson and Johnson (2009) confirm that the paralectotype female is conspecific with the lectotype male.

Examination by B. Huertas of other *P. ziska titeus* material housed in the BMNH revealed one additional syntype: 1♀ (Fig. 10) labelled "CLAUDIE R., CAPE YORK, 26 APR. 1966" [printed label prepared by J.F.R. Kerr], "B.M. Reg. No. 1966-587". This specimen must also be regarded as a paralectotype because it is part of the same series collected by Kerr and would have been available to D'Abrera. The only other specimen of *P. ziska titeus* in the BMNH collection is a male labelled "Potamon B.d., aww?, patria?", "EX MUSAE0, D<sup>ns</sup> BOISDUVAL", "Ex Oberthür Coll., Brit. Mus. 1927-3.", the locality of which is indecipherable. This specimen has no claim to be part of the type series of *P. ziska titeus*.

It is curious that the two paralectotype females were part of the original series collected in 1966 from Iron Range by Kerr and sent to England, but no mention of it was made by Kerr (1967) or Sands (1979, 1980). Presumably they were misidentified by G.E. Tite and not recognised as being conspecific with the males of this taxon. Indeed, there was difficulty locating both female specimens in the main Lepidoptera collection of BMNH because they had been misidentified and incorporated with material of *Philiris nitens lucina* Waterhouse and Lyell, 1914 (B. Huertas pers. comm.), a taxon with which it closely resembles and with which it occurs sympatrically on Cape York Peninsula. Prior to confirmation of the identity of the *P. ziska titeus* female (Samson and Johnson 2009), Braby (2000: 683) remarked that "Females in Australia have not been determined with certainty, but specimens, provisionally referred to this species, have the blue areas along the dorsum below the white central patch on the upperside of the fore wing more extensive than in *P. nitens*. Further, the anterior edge of this area of blue is sharply defined, whereas in *P. nitens* females the blue suffusion merges with the white central patch." These two character states are evident in the paralectotype females and aid in distinguishing females of *P. ziska titeus* from those of *P. nitens lucina*.

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